4. There is need of strengthening public research on adaptation for both international as well as national research systems.

5. International funding support shall be required for the operationalization of necessary adaptation and mitigation measures.

ICAR research on transgenic crops

†2503. SHRI HARENDRA SINGH MALIK: Will the Minister of AGRICULTURE be pleased to state:

(a) whether Indian Council of Agriculture Research has completed its research on transgenic crops;

(b) if so, the results thereof; and

(c) if not, the reasons for the delay and by when this research work is likely to be completed?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI HUKUMDEO NARAYAN YADAV): (a) The research on transgenic crops is of a continuous nature. A few institutes of the Indian Council of Agricultural Research are involved in the development of transgenic crops mainly using Bt genes for insect resistance.

(b) Beside cotton, the transgenics having resistance to insect pests in rice, tomato, brinjal etc. are undergoing limited field tests. The National Research Centre on Plant Biotechnology, Indian Agricultural Research Institute has developed Bt Rice and Bt Brinjal for protection from harmful lepiodopteran insects. Osmotin Potato and Annexin Brassica have been developed for drought resistance. These are under observation before their testing as per the Department of Biotechnology guidelines.

(c) The research work on developement of transgenics in different crops for different purposes is of a continuous nature. In cotton, 3 hybrids are already recommended for cultivation. In other crops research is at different stages.

After transformation and development of transgenics, the biosafety and toxicological studies are conducted under the aegis of the Department of Biotechnology, Ministry of Science and Technology, which is the nodal

†Original notice of the question was received in Hindi.

department for Biotechnology/transgenics. The final release of transgenics is approved by the Ministry of Environment and Forests after their effective evaluation.

Loss of standing crop by drought and floods

2504. SHRI RAJKUMAR DHOOT: Will the Minister of AGRICULTURE be pleased to state:

(a) whether Government have assessed the loss of standing crop and sowing of new crop, in the areas reeling under drought due to scanty or no rains and affected flash floods, in different States/UTs;

(b) if so, the details thereof;

(c) the steps being taken to prevent the situation becoming worst through contingency plan; and

(d) what steps were taken to avert the drought and flood situations, when there were such indications in the forecast of natural calamity?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI HUKUMDEO NARAYAN YADAV): (a) to (d) There are reports of serious setback in agricultural operations during the current kharif mainly due to widespread and prolonged dry spell in the South West Monsoon but in certain areas due to floods also. It will be pre-mature to assess specific losses at this stage. It is, however, estimated that there is a shortfall in area shown in respect of various crops. Union Agriculture Minister has taken a meeting of Agriculture and Relief Ministers of affected States. Central share of Calamity Relief Fund (CRF) of all affected States have been released. While there are a number of programmes for drought and floods prevention, such programmes, while affording reasonable protection to large areas, cannot altogether rule out occurrence of such natural calamities.

Assistance to drought hit States

2505. SHRI A. VIJAYA RAGHAVAN: Will the Minister of AGRICULTURE be pleased to state:

(a) whether Government have released any special assistance recently to the drought hit areas in the country;